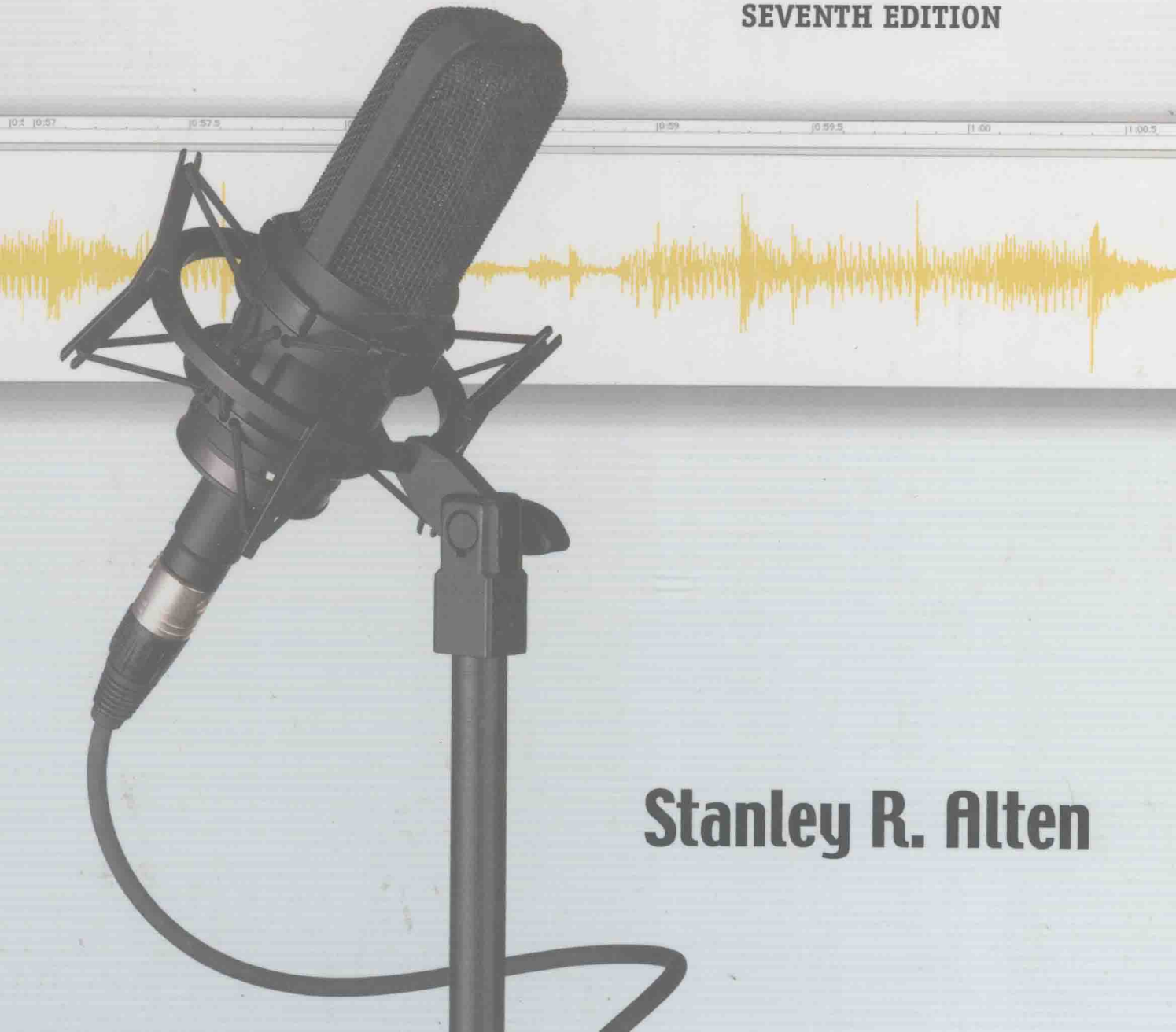
Audio in Media

SEVENTH EDITION



Stanley R. Alten

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Syracuse University

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Preface

Audio in Media takes a generic, nontechnical approach to audio production. It subsumes audio in radio, television, film, music recording, and the Internet under the rubric *sound*. Content is designed for the beginner, yet the experienced practitioner will also find it beneficial. The organization facilitates reading chapters in or out of sequence, based on need and level of background, with no disruption in continuity.

New to this edition are coverage of control surfaces; voice acting; recent developments in microphones and signal processors; expanded coverage of stereo and surround-sound miking; surround-sound mixing; digital audio production and editing; and sports production. Treatment of sound design has been broadened into three separate chapters: "Sound Design," "Sound Effects," and "Music Underscoring" (Chapters 15 through 17, respectively).

STRUCTURE OF THE BOOK

The seventh edition of *Audio in Media* begins, as all sound does, with "Ears," a chapter that emphasizes the importance of healthy hearing and discriminating listening.

Chapter 2, "Physics and Psychophysics of Sound," introduces the physical behavior of sound and its relationship to our psychophysical perception of sound stimuli.

Chapter 3, "Acoustics and Psychoacoustics," develops the material in Chapter 2 as it applies to the objective behavior of received sound, its subjective effect on those who hear it, and how these factors affect studio and control room design and construction.

Chapter 4, "Microphones," discusses their principles, types, characteristics, and accessories.

Chapter 5, "Consoles and Control Surfaces," covers basic signal flow and the design of broadcast and production consoles—analog and digital—and digital control surfaces. Patching and console automation are also discussed.

Chapter 6, "Recording," covers the characteristics of analog audiotape and multitrack recorders, basic digital theory, digital audiotape and recorders, and disk-based recording systems.

Chapter 7, "Synchronization and Transfers," covers these fundamental aspects of most production and postproduction.

Chapter 8, "Signal Processors," discusses the general principles of signal processors and their effect on sound, including multieffects processors, microphone modelers, and plug-ins for disk-based systems.

Chapter 9, "Loudspeakers and Monitoring," deals with the relationship between loudspeaker selection and control room monitoring of stereo and surround sound.

Chapter 10, "Producing Talk and Voice-overs," covers microphone and production techniques as they apply to radio and television studio programs. Also included is expanded coverage of voice-overs, including a new section on voice acting.

Chapter 11, "Producing Dialogue," addresses the many techniques involved in handling dialogue in radio and the motion picture media.

Chapter 12, "Field Production," concentrates on news and sports with an update on surround-sound techniques.

Chapter 13, "Music Production," focuses on studio-based recording of live music. It includes the characteristics of musical instruments, ways to mike them, and various approaches to miking ensembles for stereo and surround sound.

Chapter 14, "Internet Production," covers sound quality on the Internet and online collaborative recording.

Chapter 15 "Sound Design," introduces the nature and the aesthetics of designing sound, the basic structure of sonic communication, the sound/picture relationship, and strategies in designing sound. The chapter also serves as a foundation for the two chapters that follow.

Chapter 16, "Sound Effects" covers making and recording effects both in the studio and in the field.

Chapter 17 "Music Underscoring," addresses music's informational and emotional enhancement of visual content.

Chapter 18, "Editing," describes the techniques of digital hard-disk editing. It also addresses organizing the edit tracks; drive management; the aesthetic considerations that apply to editing speech, dialogue, music, and sound effects; and the uses of transitions.

Chapter 19, "Mixing and Rerecording," covers the final stage in audio production, when sounds are combined and processed into stereo or surround sound. Coverage includes the specific requirements of radio, music recording, television, and film in mixing and rerecording.

Please go to the book companion Web site for a comprehensive list of audio-related URLs and other resources:

http://communication.wadsworth.com/alten

ACKNOWLEDGMENTS

Audio in Media has been a staple in the literature of sound production since 1981. This is due in great part to the interest, advice, and guidance of teachers and practitioners in the field who have been so forthcoming with their expertise over the years. Whatever success the seventh edition enjoys is due in no small measure to their continued good advice and guidance.

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Stanley R. Alten

Respect technology, but revere talent.

—Ham Brosious, Pro Audio Marketing Pioneer

I will always sacrifice a technical value for a production value.

—Bruce Swedien, Sound Engineer/Producer

**You see the picture, but you feel the sound.
Sound can take something simple and make it extraordinary,
and affect people in ways they don't even realize.**

—Martin Bruestle, Producer, *The Sopranos*

MURPHY'S LAW OF RECORDING:
Anything that can sound different, will.

—Anonymous

Brief Contents

Contents